

553, 355

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
28 October 2004 (28.10.2004)

PCT

(10) International Publication Number  
**WO 2004/091388 A1**

- (51) International Patent Classification<sup>7</sup>: **A61B 5/022**, 5/0225
- (21) International Application Number: PCT/EP2004/003974
- (22) International Filing Date: 15 April 2004 (15.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
03008081.6 15 April 2003 (15.04.2003) EP
- (71) Applicant (for all designated States except US):  
**DEUTSCHES KREBSFORSCHUNGSZENTRUM  
STIFTUNG DES ÖFFENTLICHEN RECHTS**  
[DE/DE]; Im Neuenheimer Feld 280, 69120 Heidelberg (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BUTZ, Karin**  
[DE/DE]; Weinheimer Strasse 7, 69493 Hirschberg (DE).  
**CRNKOVIC-MERTENS, Irena** [DE/DE]; Glatzer Str.  
3a, 69124 Heidelberg (DE). **HOPPE-SEYLER, Felix**  
[DE/DE]; Hirtenaue 38, 69118 Heidelberg (DE).
- (74) Agent: **ISENBRUCK, Günter**; Isenbruck, Bösl,  
Hörschler, Wichmann, Huhn, Patentanwälte, Theodor-  
Heuss-Anlage 12, 68165 Mannheim (DE).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: LIVIN-SPECIFIC siRNAS FOR THE TREATMENT OF THERAPY-RESISTANT TUMORS

(57) Abstract: Provided is the use of siRNAs which are specific for the inhibitor of apoptosis protein (IAP) livin to sensitize tumor cells for apoptosis by down-regulating livin expression.



WO 2004/091388 A1